

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/017946

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K35/78 A61K31/198

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, MEDLINE, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/000056 A (INSPIRE PHARMACEUTICALS INC ; BROWN EDWARD G (US); JONES ARTHUR C (US)) 3 January 2003 (2003-01-03) page 17, line 30 - page 18, line 5; claims 1,2,15 page 6, line 12 - line 21	1,18-56
X	WO 98/18491 A (BURGSTINER JACQUELINE COOK & L) 7 May 1998 (1998-05-07) claims 10,16; examples 1,3	1-10, 18-56
X	US 6 291 533 B1 (FLEISCHNER ALBERT M) 18 September 2001 (2001-09-18) claims 13-15	1-4, 18-27
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

12 October 2004

Date of mailing of the international search report

10.02.2005

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 0170, no. 73 (C-1026), 15 February 1993 (1993-02-15) & JP 4 278061 A (SUNTORY LTD), 2 October 1992 (1992-10-02) abstract	1-3
X	US 5 973 224 A (FUCHS NORBERT ET AL) 26 October 1999 (1999-10-26) claim 9	1-3
A	JAY G D ET AL: "COMPARISON OF THE BOUNDARY-LUBRICATING ABILITY OF BOVINE SYNOVIAL FLUID, LUBRICIN, AND HEALON" JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, WILEY, NEW YORK, NY, US, vol. 40, no. 3, 5 June 1998 (1998-06-05), pages 414-418, XP000961337 ISSN: 0021-9304 the whole document	1-56

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 28-56 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-56 (all in part)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-56 (all in part)

Compositions comprising octacosanol in combination with at least one compound selected from elecampagne root, quercetin, L-cysteine, vitamin B1, white oak bark, vitamin B5, aloe vera gel, black cohosh, androstenedione, oat straw, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

2. claims: 1-56 (all in part)

Compositions comprising elecampagne root in combination with at least one compound selected from quercetin, L-cysteine, vitamin B1, white oak bark, vitamin B5, aloe vera gel, black cohosh, androstenedione, oat straw, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

3. claims: 1-56 (all in part)

Compositions comprising quercetin in combination with at least one compound selected from L-cysteine, vitamin B1, white oak bark, vitamin B5, aloe vera gel, black cohosh, androstenedione, oat straw, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

4. claims: 1-56 (all in part)

Compositions comprising L-cysteine in combination with at least one compound selected from vitamin B1, white oak bark, vitamin B5, aloe vera gel, black cohosh, androstenedione, oat straw, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

5. claims: 1-56 (all in part)

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Compositions comprising vitamin B1 in combination with at least one compound selected from white oak bark, vitamin B5, aloe vera gel, black cohosh, androstenedione, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

6. claims: 1-56 (all in part)

Compositions comprising white oak bark in combination with at least one compound selected from vitamin B5, aloe vera gel, black cohosh, androstenedione, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

7. claims: 1-56 (all in part)

Compositions comprising vitamin B5 in combination with at least one compound selected from aloe vera gel, black cohosh, androstenedione, oat straw, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

8. claims: 1-56 (all in part)

Compositions comprising aloe vera gel in combination with at least one compound selected from black cohosh, androstenedione, oat straw, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

9. claims: 1-56 (all in part)

Compositions comprising black cohosh in combination with at least one compound selected from androstenedione, oat straw, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

10. claims: 1-56 (all in part)

Compositions comprising androstenedione in combination with at least one compound selected from oat straw, oat straw powder, L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

11. claims: 1-56 (all in part)

Compositions comprising oat straw or oat straw powder in combination with at least one compound selected from L-methionine, shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

12. claims: 1-56 (all in part).

Compositions comprising L-methionine in combination with at least one compound selected from shitake mushroom, bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

13. claims: 1-56 (all in part)

Compositions comprising shitake mushroom in combination with at least one compound selected from bromelain, horsetail, or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

14. claims: 1-56 (all in part)

Compositions comprising bromelain in combination with at least one compound selected from horsetail or borage oil, and use thereof for lubricating a joint or treating a degenerative joint disorder.

15. claims: 1-56 (all in part)

Compositions comprising borage oil in combination with horsetail and use thereof for lubricating a joint or treating a degenerative joint disorder.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 240

Continuation of Box 3.

Although claims 28-56 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/017946

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03000056	A	03-01-2003	GB 2394419 A WO 03000056 A1 US 2003027785 A1	28-04-2004 03-01-2003 06-02-2003
WO 9818491	A	07-05-1998	CA 2270223 A1 WO 9818491 A1	07-05-1998 07-05-1998
US 6291533	B1	18-09-2001	US 2003044473 A1 US 6503529 B1	06-03-2003 07-01-2003
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US 5973224	A	26-10-1999	AT 405477 B AT 60796 A AT 219889 T DE 59707620 D1 DK 799578 T3 EP 0799578 A2 ES 2179294 T3 JP 3122390 B2 JP 10028551 A PT 799578 T SI 799578 T1	25-08-1999 15-01-1999 15-07-2002 08-08-2002 28-10-2002 08-10-1997 16-01-2003 09-01-2001 03-02-1998 29-11-2002 31-12-2002